FAAC

Safety Data Sheet

Issued: January 19, 2004

FAAC HP OIL

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product name: FAAC HP OIL

Product code: 714017

Product type: Hydraulic oil Supplier: FAAC S.p.A.

Address: FAAC S.p.A., Via Benini 1

Zola Predosa (BO), ITALY

Contact numbers:

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation description: Blend of highly-refined mineral oils and additives.

Dangerous

On the basis of available information, the components of this preparation are not expected to impart hazardous properties to components/constituents:

this product.

3. HAZARDS IDENTIFICATION

Human health hazards: Prolonged or repeated exposure may give rise to dermatitis.

Contains mineral oil for which an exposure limit for oil mist

applies. Used oil may contain harmful impurities.

Safety hazards: Not classified as flammable, but will burn.

Environmental hazards: Not readily biodegradable. Has the potential to bioaccumulate.

Other information: Not classified as dangerous for supply or conveyance.

4. FIRST AID MEASURES

Symptoms and effects: Not expected to give rise to an acute hazard under normal

conditions of use. Under high temperature conditions, vapours irritating to the nose, throat and upper respiratory tract may be

produced.

First Aid - Inhalation: Remove to fresh air. If rapid recovery does not occur, obtain

medical attention.

First Aid - Skin: Remove contaminated clothing and wash affected skin with

soap and water. If persistent irritation occurs, obtain medical attention. If high pressure injection injuries occur, obtain medical

attention immediately.

First Aid - Eye: Flush eye with copious quantities of water. If persistent irritation

occurs, obtain medical attention.

First Aid - Ingestion: Do not induce vomiting. Wash out mouth with water and obtain

medical attention.

Advice to physicians: Treat symptomatically. Dermatitis may result from prolonged or

repeated exposure.

5. FIRE FIGHTING MEASURES

Specific hazards: Combustion is likely to give rise to a complex mixture of airborne

solid and liquid particulates and gases, including carbon monoxide, oxides of sulphur, and unidentified organic and

inorganic compounds.

Extinguishing media: Foam and dry chemical powder. Carbon dioxide, sand or earth

may be used for small fires only.

Unsuitable extinguishing

media:

Water in a jet. Use of Halon extinguishers should be avoided for

environmental reasons.

Protective equipment: Proper protective equipment including breathing apparatus must

be worn when approaching a fire in a confined space.

Other information: Keep adjacent containers cool by spraying with water.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breathe:vapour,mists, aerosols.Ventilate contaminated

area thoroughly. Avoid contact with:skin,eyes, clothing. Take off

immediately all contaminated clothing.

Personal protection: Wear: PVC or nitrile rubber gloves. Safety boots - rubber, knee

length. Jacket and trousers - PVC.If risk of inhalation of aerosols/mists/spray wear: Half mask respirator with organic vapour cartridge and built-in particulate filter NPF (gas only).In a confined space, wear: Self-contained breathing apparatus open

circuit type NPF 2000.).

Environmental precautions:

Prevent from entering into drains, ditches or rivers. Use appropriate containment to avoid environmental contamination.

Inform local authorities if this cannot be prevented.

Clean-up methods - small

spillage:

Absorb or contain liquid with sand, earth or spill control material. Shovel into a suitable, clearly marked container for disposal or

reclamation in accordance with local regulations.

Clean-up methods - large

spillage:

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an

absorbent. Dispose of as for small spills.

Other information: Observe all relevant local regulations. See Section 13 for

information on disposal.

7. HANDLING AND STORAGE

Handling: When using do not eat, drink or smoke. When handling product

in drums, safety footwear should be worn and proper handling

equipment should be used. Prevent spillages.

Storage: Keep only in original container. Keep in a cool, dry, well-

ventilated place. Keep away from direct sunlight and other

sources of heat or ignition. Keep in a bunded area.

Other information: Never siphon by mouth.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controlUse local exhaust ventilation if there is a risk of inhalation of

measures: vapours, mists or aerosols.

Occupational exposure Threshold limit values are given below. Lower

standards: exposure limits may apply locally:

Component name Limit type Value Unit Other information
Oil mist, mineral TWA 5 mg/m³ ACGIH/2000

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Oil mist, mineral STEL 10 mg/m³ ACGIH/2000

Hygiene measures: Wash hands before eating, drinking, smoking and using the

toilet

Respiratory protection: Not normally required. If risk of inhalation of

aerosols/mists/sprays wear: Half mask respirator with organic vapour cartridge and built-in particulate filter NPF20 (gas only).

Hand protection: PVC or nitrile rubber gloves.

Eye protection: Wear chemical monogoggles if splashes are likely to occur or in

high pressure applications.

Body protection: Wear overalls to minimise contamination of personal clothing.

Launder overalls and undergarments regularly. Safety shoes or

boots - chemical resistant. If splashes are likely to occur, wear: PVC apron. Minimise all forms of skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid at ambient temperature

Colour: Red

Odour: Characteristic mineral oil

Vapour pressure: Data not available

Density: 850 to 870 kg/m³ at 15°C

Kinematic viscosity: 13 to 14 mm²/s at 40°C

Vapour density (air=1): Data not available

Pour point: < -60°C

Flash point: circa 105°C (PMCC)
Flammability limit - lower: Data not available

Flammability limit - upper: Data not available

Auto-ignition temperature: Data not available

Solubility in water: Negligible

n-octanol/water partition

coefficient:

Data not available

10. STABILITY/REACTIVITY

Stability: Stable.

Conditions to avoid: Extremes of temperature and direct sunlight.

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Materials to avoid: Strong oxidizing agents.

Hazardous decomposition

products:

Hazardous decomposition products are not expected to form

during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for assessment: Toxicological data have not been determined specifically for this

product. Information given is based on a knowledge of the

components and the toxicology of similar products.

Acute toxicity - oral: LD₅₀ expected to be above 2000 mg/kg

Acute toxicity - dermal: LD₅₀ expected to be above 2000 mg/kg

Acute toxicity - inhalation: Not considered to be an inhalation hazard under normal

conditions of use.

Eye irritation: Expected to be slightly irritant. **Skin irritation:** Expected to be slightly irritant.

Respiratory irritation: If mists are inhaled, slight irritation of the respiratory tract may

occur.

Skin sensitization: Not expected to be a skin sensitizer.

Carcinogenicity: Product is based on mineral oils of types shown to be non-

carcinogenic in animal skin-painting studies. Other components are not known to be associated with carcinogenic effects.

Human effects: Prolonged/repeated contact may cause defatting of the skin

which can lead to dermatitis.

Other information: Used oils may contain harmful impurities that have accumulated

during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and

skin contact avoided as far as possible.

12. ECOLOGICAL INFORMATION

Basis for assessment: Ecotoxicological data have not been determined specifically for

this product. Information given is based on a knowledge of the

components and the ecotoxicology of similar products.

Mobility: Liquid under most environmental conditions. Floats on water. If it

enters soil, it will adsorb to soil particles and will not be mobile.

Persistence/degradability: Not expected to be readily biodegradable.

Bioaccumulation: Contains components with the potential to bioaccumulate.

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Ecotoxicity: Poorly soluble mixture. Product is expected to be practically

non-toxic to aquatic organisms, $LL/EL_{50} > 100$ mg/l. (LL/EL_{50} expressed as the nominal amount of product required to prepare aqueous test extract). May cause physical fouling of aquatic

organisms.

Sewage treatment: Data not available.

13. DISPOSAL CONSIDERATIONS

Precautions: See Section 8.

Waste disposal: Used or waste oil should be recycled or disposed of in

accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the contractor to deal satisfactorily with used oil should be

established beforehand. Used or waste oil should not be allowed

to contaminate soil or water.

Product disposal: As for waste disposal.

Container disposal: All containers should be emptied and returned to the supplier or

sent to a drum reconditioner or metal recoverer without

removing or defacing markings or labels.

Local legislation:

14. TRANSPORT INFORMATION

Not dangerous for conveyance under UN, IMO, ADR/RID and IATA/ICAO codes.

15. REGULATORY INFORMATION

EC Classification: Not classified as dangerous under EC criteria.

EINECS (EC): All components listed or polymer exempt.

MITI (Japan): Not established.

TSCA (USA):

All components listed.

All components listed.

DSL (Canada):

All components listed.

National legislation:

Other information:

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16. OTHER INFORMATION

Uses and restrictions: Intended for use as a hydraulic fluid in numerous applications

requiring a hydraulic fluid based on a mineral oil. Such applications include: aircraft hydraulic systems, undercarriage retraction mechanisms, flap jacks and control mechanisms, brakes, shock absorbers, automatic pilots, oleo legs, tail wheels, servo units, etc. Also suitable for lubricating de-icing pumps and

gearboxes. This product must not be used in systems incorporating natural rubber. Not to be used as an engine lubricating oil. This product must be used, handled and applied in accordance with the requirements of the equipment manufacturer's manuals, bulletins and other documentation.

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First issued: 19/01/2004

Revised:

Revisions highlighted:

SDS distribution: This document contains important information to ensure the safe

storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

Other information:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be construed as guaranteeing any specific property of the product.

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